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## **ABSTRACT**

An intensified hybrid solid-state sensor includes an imaging device comprising a solid-state sensor assembled with an image intensifier cathode, microchannel plate (MCP), and body envelope. This device combines the best functions of the image intensifier, good signal-to-noise ratio and high logarithmic gain, with the electronic read-out functions either of a Complementary Metal Oxide Semiconductor (CMOS) or charged coupled device (CCD). Applications for this invention are primarily night vision systems where good low light sensitivity and high gain are required.